

WHAT IS CLAIMED IS:

1. A zoom method comprising:

searching a center search line of a photographic screen;

extracting a color average value and a deviation of a photographic object within the photographic screen; and

setting a zoom ratio according to a calculated size of the photographic object.

2. The method of claim 1, wherein extracting the color average value and the deviation comprises searching upper and lower lines.

3. The method of claim 1, further comprising calculating the size of the photographic object based on the average value and the deviation.

4. The method of claim 3, wherein calculating the size of the photographic object comprises:

analogizing a size of a photographic object by calculating the average value and the deviation; and

judging whether the photographic object is a normal region corresponding to a photographic mode.

5. The method of claim 4, further comprising converting a digital camera into a user hand mode so that a user can perform a direct zoom processing when the photographic object is not a normal region.

6. The method of claim 1, wherein searching the center search line comprises:
setting a photographic mode;
preprocessing the photographic screen; and
performing a line scanning at a region of the center search line.

7. The method of claim 6, wherein preprocessing the photographic screen comprises performing one of a smoothing method and a blurring method for minimizing error generation.

8. The method of claim 1, wherein the center search line comprises a horizontal axis including an approximate center of the photographic screen and a reference for starting an initial line scanning.

9. The method of claim 1, wherein extracting the color average value and a deviation of the photographic object comprises:
detecting the photographic object by searching the center search line;
searching a predetermined number of upper and lower search lines based on the center search line; and

extracting the color average value and the deviation of the photographic object.

10. The method of claim 9, wherein searching the predetermined number of upper and lower search lines comprises performing a line-scanning, and searching lines set with a predetermined gap up and down one line by one line.

11. The method of claim 9, wherein when the photographic object is not detected, the method further comprises:

resetting the center search line;

resetting upper and lower search lines based on the reset center search line;

and

searching the predetermined number of upper and lower search lines based on the reset search line.

12. The method of claim 1, wherein setting the zoom ratio comprises calculating the zoom ratio by comparing the calculated size of the photographic object with a reference value.

13. The method of claim 12, wherein the reference value comprises one of a value manually preset by a user and a value preset based on a screen contrast.

14. A zoom method comprising:
 - searching a predetermined number of lines of a photographic screen;
 - extracting a color average value and a deviation of a photographic object on the photographic screen;
 - judging a size of a photographic object based on the average value and the deviation;
 - setting a zoom ratio based on a calculated size of the photographic object and a reference value; and
 - applying the zoom ratio to the photographic object.
15. The method of claim 14, further comprising:
 - setting a center search line of the photographic screen and performing a line scan.
16. The method of claim 14, further comprising:
 - preprocessing the photographic screen according to a set photographic mode.
17. The method of claim 16, wherein the photographic mode comprises one of a portrait mode and a text mode.
18. The method of claim 16, wherein the preprocessing comprises one of a smoothing method and a blurring method for minimizing error generation.

19. The method of claim 14, wherein the center search line comprises a horizontal axis including an approximate center of the photographic screen and a reference for performing a line scan in order to detect the photographic object.

20. The method of claim 14, further comprising resetting the center search line and performing a line scan based on the reset center search line when the photographic object is not detected.

21. The method of claim 14, wherein searching the predetermined number of lines comprises alternatively searching lines with a pre-determined gap up and down one line by one line.

22. The method of claim 14, further comprising converting into a user hand mode so that a user can perform a direct zoom processing when the photographic object is not a normal region.

23. The method of claim 14, wherein the reference value comprises one of a value preset manually by a user and a value preset based on a screen contrast.

24. A zoom method of a digital camera apparatus associated with a mobile communication terminal, the method comprising:

searching a search line of a photographic screen to detect a photographic object;

searching upper and lower search lines to extract at least one of an average value and a deviation of a skin color of the photographic object; and

calculating a size of a face region based on the extracted average value and the deviation of the skin color.

25. The method of claim 24, further comprising:

comparing the calculated size of the face region with a reference value; and
calculating a zoom ratio based on the comparison.

26. The method of claim 25, further comprising:

applying the calculated zoom ratio to the photographic screen.

27. The method of claim 24, wherein the search line comprises a center search line positioned approximately at a center of the photographic screen.

28. The method of claim 24, further comprising resetting a search line and searching the reset search line.

29. The method of claim 24, wherein searching upper and lower search lines comprises alternatively searching lines set with a predetermined gap up and down one line by one line.

30. The method of claim 24, wherein calculating the size of the face region comprises:

calculating an area of the face region by obtaining a number of pixels that exist within a range of a certain deviation from an average value of a skin color.

31. The method of claim 24, wherein calculating the size of the face region comprises:

analogizing a length of a longest search line as a face width by obtaining a length variation through search lines having a smaller gap than the upper and lower search lines.

32. The method of claim 24, wherein calculating the size of the face region comprises judging whether a calculated face region is a normal photographic object.

33. The method of claim 32, further comprising converted the digital camera into a user hand mode so that a user can perform a direct zoom processing when the calculated face region is not a normal photographic object.

34. The method of claim 24, wherein when plural skin colors more than a certain length exist at the search line and skin colors of a same pattern are detected at adjacent upper and lower search lines, the method further comprises:

judging that a plurality of photographic objects exist;
extracting an average value and a deviation of a skin color for each photographic object judged to be a face;
calculating an area of a face region by obtaining a number of pixels that exist within a range of a certain deviation from the average value of each skin color; and
zooming a photographic screen with a preset zoom ratio based on the number and a face size of the photographic object.

35. A digital camera zoom method for a mobile communication terminal, the method comprising:

searching a center search line of a photographic screen in order to detecting text;
detecting an average value of a stroke thickness of the text by searching upper and lower search lines; and

calculating a size of the text based on the detected average value of the stroke thickness of a text.

36. The method of claim 35, further comprising:
zooming the photographic screen to a maximum degree and enlarging the text.
37. The method of claim 35, further comprising:
comparing the calculated size of the text with a reference value; and
calculating a zoom ratio based on the comparison.
38. The method of claim 37, further comprising:
applying the calculated zoom ratio to the photographic screen.